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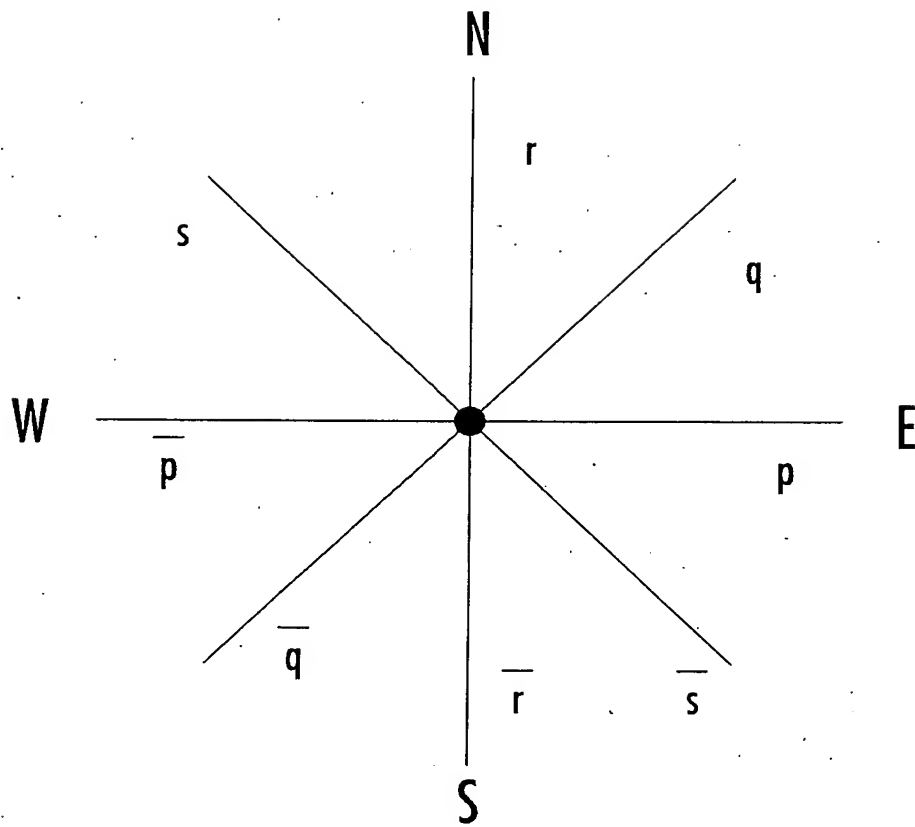


FIG. 1

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Step 1.

$$[-p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$$

Represent Schema in vector notation

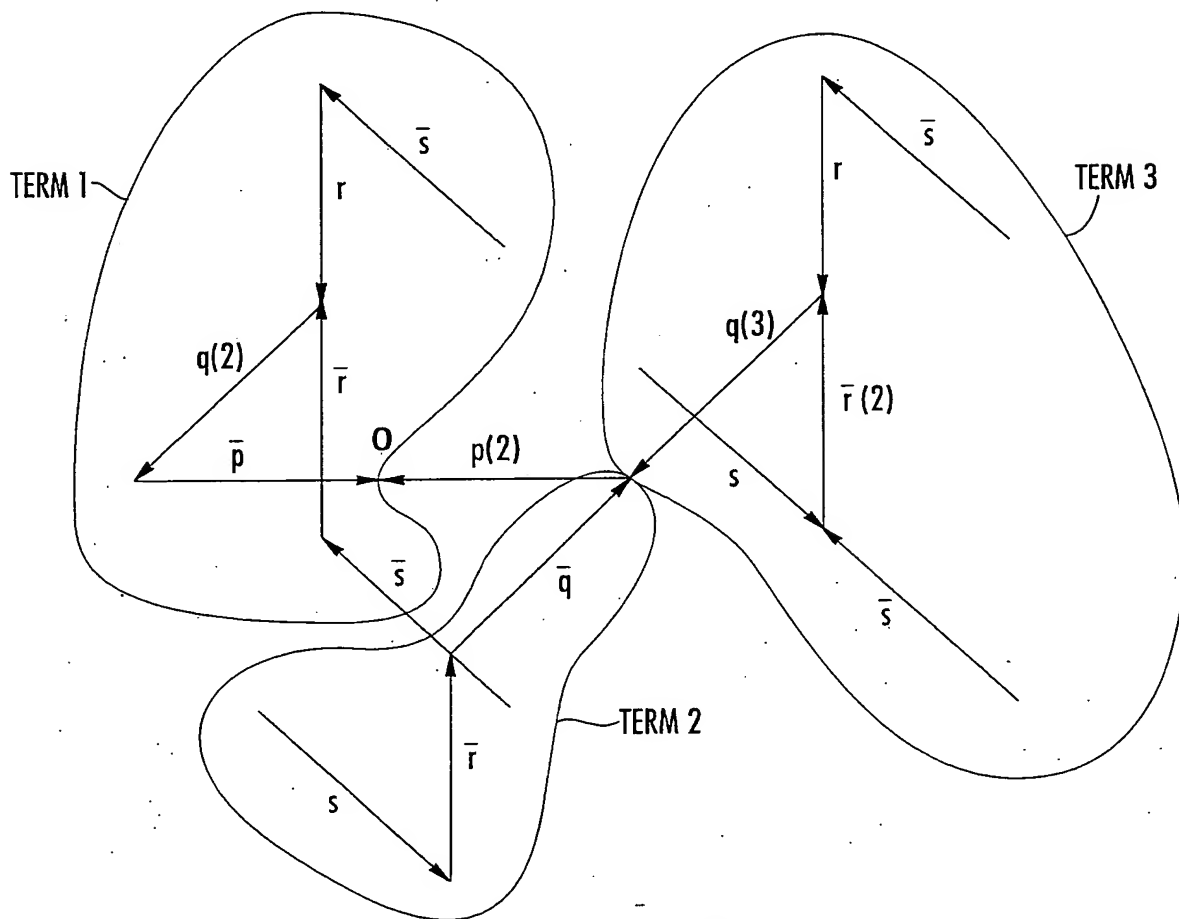


FIG. 2



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Step 2.

$[-p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$

2. Find greatest symmetry about an opposed couple
 $p; -p$

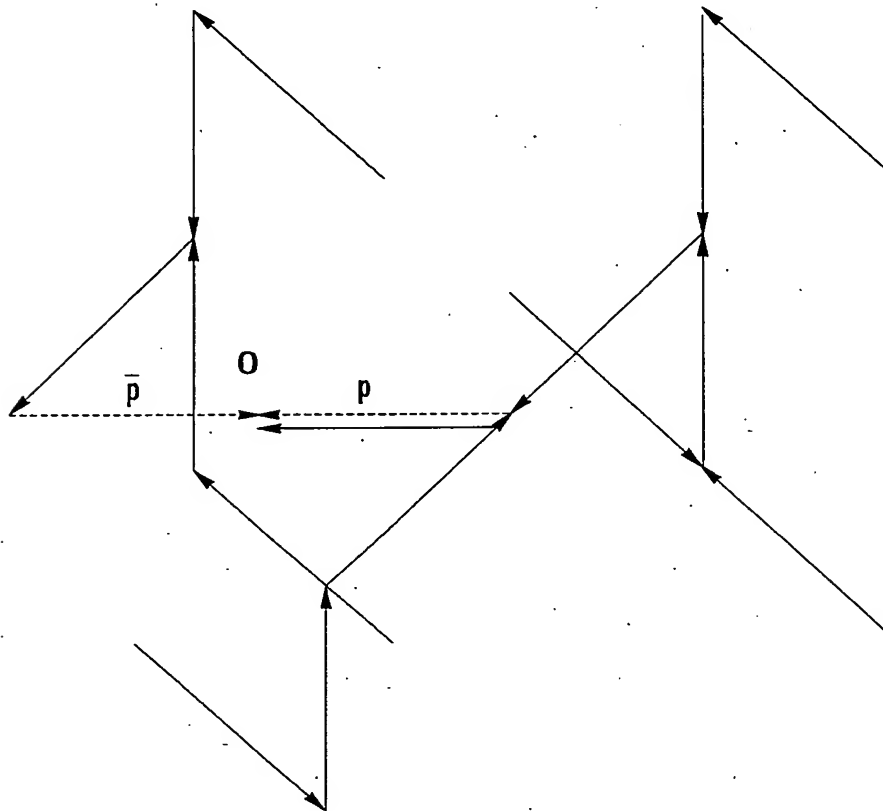


FIG. 3

Step 3

$$[p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$$

3. Delete the couple, superimpose the symmetries, and delete resulting redundancies. Keep multiple paths (e.g. pq-rs) open.

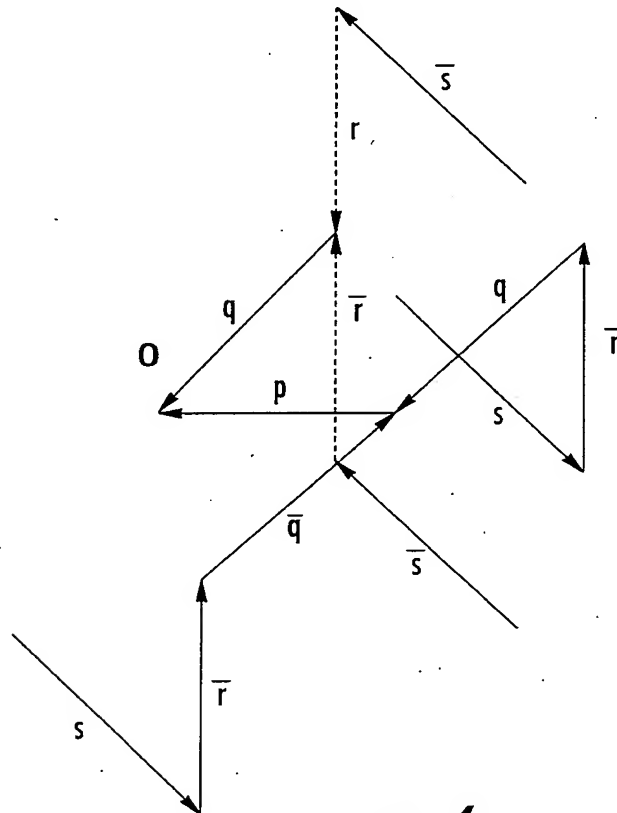


FIG. 4.

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Step 4

$[-p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$

Repeat Steps 2 and 3 for the $r, -r$ couple

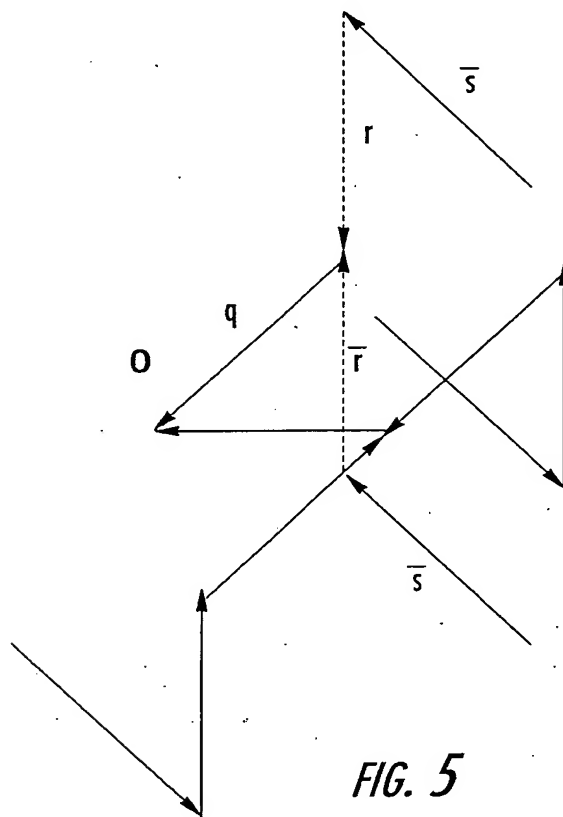


FIG. 5



Results of Step 4

$$[-p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$$

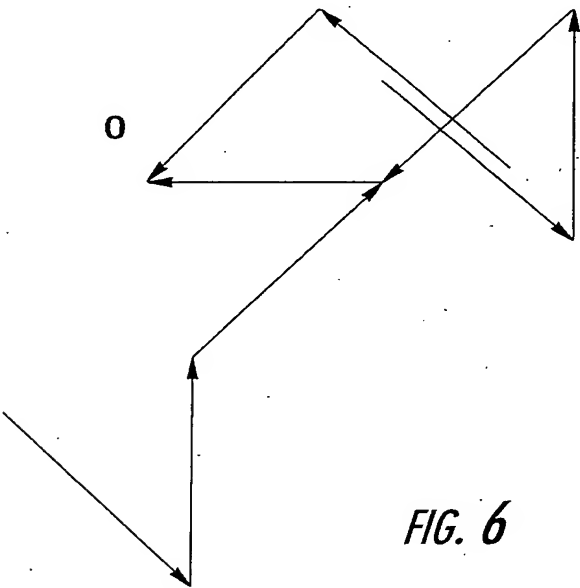


FIG. 6

Step 5

$$[-p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$$

Repeat Steps 2 and 3 for $q, -q$ couple.

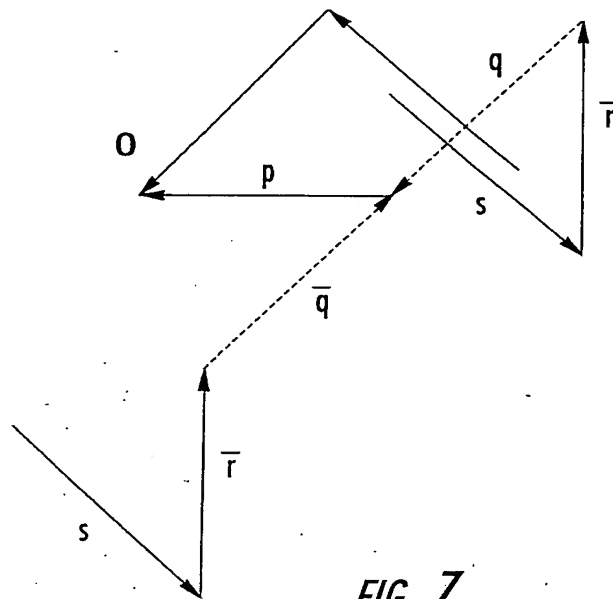


FIG. 7

Diagram 7

$$[-p(qr-s \vee q-r-s)] \vee p-q-rs \vee \{p[q(r-s \vee -r-s \vee -rs)]\}$$

Resulting simplified logical expression is:

$$S^*=q-s \vee p-rs$$

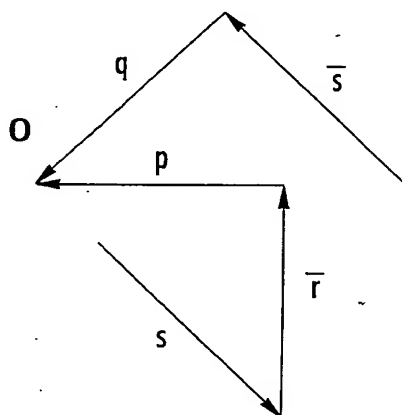


FIG. 8

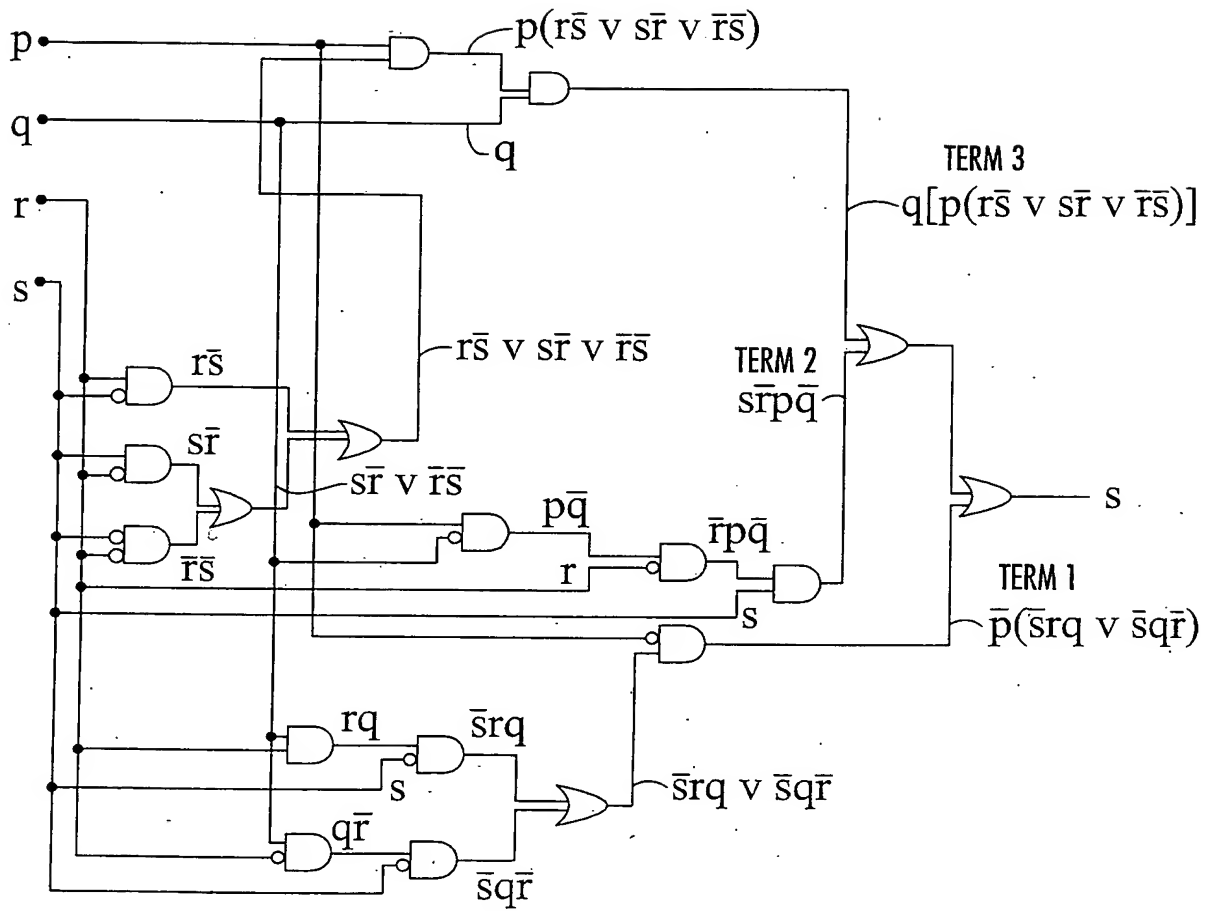


FIG. 9



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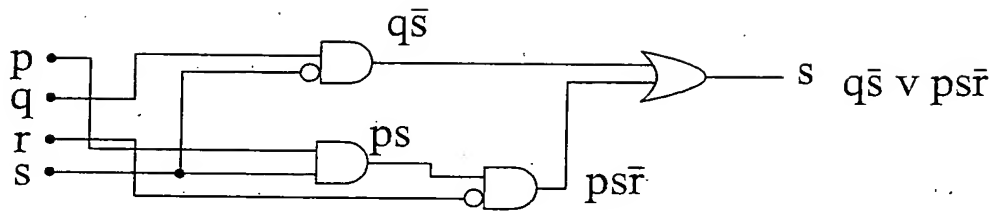


FIG. 10